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PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			EXAMINER SHAW, YIN CHEN	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/827,593	Applicant(s) HAMALAINEN ET AL.	
	Examiner Yin-Chen Shaw	Art Unit 2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19,21,23-28,31-53,55-59,61-70,74-82,84-94,96,97 and 122-135 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19,21,23-28,31-53,55-59,61-70,74-82,84-94,96,97 and 122-135 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This written action is responding to the communication dated on 04/09/2008.
2. Claims 19, 21, 27, 35, 49, 51, 53, 55, 59, 74, 82, 86, 97, and 122-123 have been amended. Claims 124-135 are newly added claims.
3. Claims 19, 21, 23-28, 31-53, 55-59, 61-70, 74-82, 84-94, 96-97, and 122-135 have been examined and rejected.
4. Claims 19, 21, 23-28, 31-53, 55-59, 61-70, 74-82, 84-94, 96-97, and 122-135 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19, 21, 23, 27-28, 31, 48, 55-59, 61-62, 65-66, 68, 77-79, 81-82, 84-85, 87, 90-91, 93-94, and 96-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot (U.S. Patent 4,555,805) and further in view of Raith et al. (U. S. Patent 5,546,464).

As per claims 19, 48, 59, 65, and 82:

Talbot disclose "a method and apparatus for determining a ciphering mode of data communication between a mobile

communication network and a mobile station in the mobile communication network, the mobile station being capable of communication in at least one enciphered mode of communication and in at least one enciphered mode of communication” in (Col. 3 lines 22-45), “the method comprising: “monitoring at the mobile station signal sent from the mobile communication network to the mobile station” in (Col. 1 lines 22-27 and Col. 10, lines 43-46) for a cipher mode control signal, the cipher mode control signal is for setting the mobile station into an enciphered mode of communication” in (Col. 3 line 60 to Col. 4 line 12).

Talbot further discloses monitor at the mobile station a cipher signature and then switching the communication to a cipher mode” in (Col. 3 line 60 to Col. 4 line 12, and Col. 9 lines 30-55).

Talbot does not expressly disclose the remaining limitation of the claim. However, Raith et al. disclose responsive to reception of a cipher mode control signal from the mobile communication network, indicating to a user of the mobile station that the mobile communication network is configured to use an enciphered mode of communication” in (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Col. 8 lines 25-32).

Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Talbot

teaching with Raith et al. since one would be motivated to selectively establish and maintain cipher synchronization between a base station and mobile station for the encryption of data communications within such a system (Col. 1 lines 29-32 from Raith et al.).

As per claims 21 and 61:

Talbot and Raith et al. disclose “a method and apparatus according to claims 19 and 59, further comprising the step of indicating that to a user of the mobile station that the mobile communication network is configured to use an unciphered mode of communication if no cipher mode control signal is received at the mobile station from the mobile communication network” in (Col. 3 line 57 to Col. 4 line 30, and Col. 10 line 65 to Col. 11 line 10 from Talbot) and (Col. 6 lines 17-23 from Raith et al.).

As per claims 23 and 62:

Talbot and Raith et al. disclose “a method and apparatus according to claim 59, wherein the apparatus is operable to determine the ciphering mode to be used in communication between the mobile communication network and the mobile station during establishment of communication between the

mobile communication network and the mobile station (Col. 10 lines 9-30 from Talbot).

As per claim 27:

Talbot and Raith et al. disclose “a method according to claim 19, further comprising:

maintaining a cipher mode indication data field in the mobile station;

initially setting said cipher mode indication data field into a first state indicative the mobile communication network is configured to use an unciphered mode of communication; and

responsive to reception of a cipher mode control signal from the mobile communication network, updating the state of the cipher mode indication data field into a second state indicative that the mobile communication network is configured to use an enciphered mode of communication” in (Col. 3 line 60 to Col. 4 line 12, and Col. 9 lines 30-55 from Talbot) and (Col. 6 lines 17-23 from Raith et al.).

As per claims 28 and 68:

Talbot and Raith et al. disclose “a method and apparatus according to claims 19 and 59, further comprising indicating a

ciphering mode, a change in ciphering mode to a user of the mobile station” in (Col. 5 lines 49-67 to Col. 6 lines 1-23 from Raith et al.).

As per claims 31 and 66:

Talbot and Raith et al. disclose “a method and apparatus according to claims 19 and 59, wherein said means for indicating a ciphering mode to a user of the mobile station comprise a display unit (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 55:

Talbot and Raith et al. disclose “a method according to claim 19, comprising using the mobile station in communication with a terminal in a fixed line communication network, and the method further comprising indicating a ciphering mode used in communication between the fixed line communication network and the terminal in the fixed line communication network to a user of the mobile station” in (Col. 4, lines 48-53 from Talbot) and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 56:

Talbot and Raith et al disclose “a method according to claim 55, wherein the mobile station sends an inquiry message to the terminal in the fixed line communication network to determine the ciphering mode used in communication between the fixed line communication network and said terminal in the fixed line network” in (Col 3 line 60 to Col 4 line 12 from Talbot) and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 57:

Talbot and Raith et al. disclose “a method according to claim 56, wherein if the mobile station does not receive a response to said inquiry message, the mobile station indicates that the ciphering mode is unknown” in (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot) and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 58:

Talbot and Raith et al. disclose “a method according to claim 55, wherein if the mobile station receives a response to said inquiry message, but cannot interpret said response the mobile station indicates that the ciphering mode is unknown” in (Col 4 lines 58-

68) and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 65:

Talbot and Raith et al. disclose “an apparatus according to claim 59, further comprising: means for maintaining a cipher mode indication data field; means for setting said cipher mode indication data field initially into a first state indicative that the mobile communication network is configured to use an un-ciphered mode of communication”; and means responsive to said determining means for changing the state of the cipher mode indication data field into a second state indicative that the mobile communication network is configured to use an enciphered mode of communication, if said monitored signals comprise a cipher mode control signal” in (Col 3 line 60 to Col 4 line 12 from Talbot) and (Col. 5 lines 49-57 to Col. 6 lines 1-23 from Raith et al.).

As per claims 77, 79, 81, 87, and 93:

Talbot and Raith et al. disclose “an apparatus according to claims 76, 78, 80, 86, and 92, further comprising a cipher mode indicator, the user interface block being arranged to control the cipher mode indicator according to said indication” in (Col 4 lines 40-54 from Talbot) and (Col. 6 lines 17-23 from Raith et al.).

As per claims 78, 90, and 91:

Talbot and Raith et al. disclose “an apparatus according to claims 74, 86, and 90, further comprising a user interface block, wherein the cipher indication memory block provides an indication of the state of said cipher mode indication data field to the user interface block when the state of said cipher mode indication data field is changed” in (Col 4 lines 40-54 from Talbot) and (Col. 6 lines 17-23 from Raith et al.).

As per claim 84:

Talbot and Raith et al. disclose “a mobile station according to claim 82 wherein said means responsive to said determining means for indicating a ciphering mode to a user of the mobile station are further configured to indicate that the mobile communication network is configured to use an un-ciphered mode of communication, if said monitored signals do not comprise a cipher mode control signal” in (Col 3 line 60 to Col 4 line 12 from Talbot) and (Col. 5 lines 49-57 to Col. 6 lines 1-23 from Raith et al.).

As per claims 85 and 94:

Talbot teaches “a system for determining a ciphering mode of communication between a mobile communication network and a mobile station in the mobile communication network, the mobile station being capable of communication in at least one enciphered mode of communication and at least one un-ciphered mode of communication” in (Col 3 line 60 to Col 4 line 12), the system comprising:

means in the mobile communication network for determining whether an enciphered mode of communication is to be used in communication between the mobile communication network and the mobile station according to a setting of the mobile communication network (Col 3 line 60 to Col 4 line 12, and Col 4 lines 58-68); means in the mobile communication network for sending a cipher mode control signal from the mobile communication network to the mobile station in a situation where an enciphered mode of communication is to be used in communication between the mobile communication network and the mobile station, (Col 3 line 60 to Col 4 line 12); means in the mobile station for determining if signals comprise a cipher mode control signal; and means responsive to said determining means for indicating that an enciphered mode of communication is to be used in communication between the mobile communication

network and the mobile station, if said monitored signals comprise a cipher- mode control signal (Col 3 line 60 to Col 4 line 12 and Col 3 lines 35-50).

Talbot does not expressly disclose the remaining limitations. However, Raith et al. disclose “means in the mobile station for monitoring signals sent from the mobile communication network to the mobile station; means in the mobile station for setting the mobile station into an enciphered mode of communication if said monitored signals comprise a cipher mode control signal said cipher mode control signal for setting the mobile station into an enciphered mode of communication; means for indicating a ciphering mode to a user of the mobile station” in (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Col. 8 lines 25-32).

Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Talbot teaching with Raith et al. since one would be motivated to selectively establish and maintain cipher synchronization between a base station and mobile station for the encryption of data communications within such a system (Col. 1 lines 29-32 from Raith et al.).

As per claim 96:

Talbot and Raith et al. disclose “a system according to claim 94, wherein said means for indicating a ciphering mode to a user of the mobile station are further configured to indicate that the mobile communication network is configured to use an unciphered mode of communication, if said monitored signals do not comprise a cipher mode control signal” in (Col. 3 line 57 to Col. 4 line 30, and Col. 10 line 65 to Col. 11 line 10 from Talbot) and (Col. 6 lines 17-23 from Raith et al.).

As per claim 97:

Talbot teaches “A data processor external to a mobile station and capable of use with the mobile station for communication between the external data processor and a mobile communication network via the mobile station, the mobile station being capable of communication in at least one enciphered mode of communication and in at least one unciphered mode of communication (Col 3 line 60 to Col 4 line 12), the external data processor comprising an input for receiving from the mobile station, information concerning a ciphering mode used in communication between the mobile station and the mobile communication network, and means responsive to information received from the mobile station for indicating a ciphering mode

used in communication between the mobile station and the mobile communication network” in (Col 3 line 60 to Col 4 line 12).

Talbot does not expressly disclose “display unit for indicating ciphering mode used in communication between the mobile station and the mobile communication network”.

However, Raith et al. disclose indication to the user of the ciphering mode used in communication between the mobile station and the mobile communication network in (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138).

Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Talbot teaching with Raith et al. since one would be motivated to selectively establish and maintain cipher synchronization between a base station and mobile station for the encryption of data communications within such a system (Col. 1 lines 29-32 from Raith et al.).

6. Claims 24-26 and 63-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. and further in view of Billstrom et al, US Patent No 5590133, hereinafter "Billstrom".

As per claims 24-25 and 63-64:

Talbot and Raith et al. disclose "a method and apparatus according to claims 19, 24, 59, and 63". However, Talbot and Raith do not expressly disclose "comprising determination of the ciphering mode to be used in communication prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure".

Nevertheless, Billstrom discloses the "Apparatuses and Mobile stations for providing packet data communication in digital TDMA Cellular Systems" invention, which teaches "the determination of the ciphering mode to be used in data communication prior to establishment of data communication between the mobile communication network and the mobile station is performed by means of a location update procedure" in (Col 9 lines 20-50, and Col 10 lines 45-61). Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art at the time of invention to incorporate Billstrom with ciphering mode teaching in Talbot and Raith et al. since one would be motivated

to provide shared packet data channels optimized for packet data (lines 48-49, Col. 3 from Raith et al.).

As per claim 26:

Talbot and Raith et al. disclose “a method according to claim 19. Talbot and Raith et al. do not expressly disclose the remaining limitation of the claim. However, Billstrom discloses the “Apparatuses and Mobile stations for providing packet data communication in digital TDMA Cellular Systems” invention, which teaches a method of negotiating a cipher mode during a handover process (Col 8 lines 46 to Col 9 line 20, and Col 9 lines 20 to 67). Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art at the time of invention to incorporate Billstrom with ciphering mode teaching in Talbot and Raith et al. since one would be motivated to provide shared packet data channels optimized for packet data (lines 48-49, Col. 3 from Raith et al.).

7. Claims 32-34, 67, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. and further view of Lewis et al, US Patent No. 6192255, hereinafter “Lewis”.

As per claims 32 and 67:

Talbot and Raith et al. disclose “a method and apparatus according to claim 19”. Talbot and Raith et al. do not disclose, “the mobile station comprises a light source the method comprising indicating the ciphering mode used in communication between the mobile communication network and the mobile station to a user of the mobile station using the light source”. However, Lewis discloses “the mobile station comprises a light source and the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the light source” in (Col 20 lines 10-15, and Col 16 lines 40-67). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Talbot and Raith et al. with Lewis to display the information for alerting the user.

As per claims 33 and 69:

Talbot and Raith et al. disclose “a method and apparatus according to claims 28 and 68”. Talbot and Raith et al. do not disclose, “the mobile station comprises a display unit and an acoustic signal forming element, the method comprising indicating the ciphering mode used in communication between the mobile

communication network and the mobile station to a user of the mobile station using the display unit, and indicating a change in ciphering mode to a user of the mobile station using the acoustic signal forming element". However, Lewis discloses "the mobile station comprises a display unit and an acoustic signal forming element, the ciphering mode used in data communication between the mobile communication network and the mobile station is indicated with the display unit, and a change in ciphering mode is indicated with the acoustic signal forming element" in (Col 10 lines 53-67, Col 20 lines 10-15, and Col 16 lines 40-67).

Therefore, it would have been obvious at the time of the invention was made for one ordinary skill in the art to incorporate Talbot and Raith et al. with Lewis to display the information for alerting the user.

As per claim 34:

Talbot and Raith et al. disclose "a method according to claim 32". Talbot and Raith et al. do not disclose, "comprising indicating a change in ciphering mode is indicated with a flashing light". However, Lewis discloses "A change in ciphering mode is indicated with a flashing light" in (Col 20 lines 10-15, and Col 16 lines 40-67). Therefore, it would have been obvious at the time of

the invention was made for one ordinary skill in the art to incorporate Talbot and Raith et al. with Lewis to display the information for alerting the user.

8. Claims 35 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. and further in view of Kniffin et al, US Patent No. 6072402, hereinafter "Kniffin"

As per claims 35 and 70:

Talbot and Raith et al. disclose "a method and apparatus according to claims 28 and 68 characterized in that the means for indicating a change in the cipher mode by the flashing light and vibration. Talbot and Raith et al. do not teach a change in the cipher mode causing to generate vibration. However, Kniffin discloses "Secure Entry System with Radio Communications" invention, which including a signaling means to alert the user, such as beeping, vibrating, or displaying in (Col 7 lines 10-15, and Col 10 lines 10-20). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate alert mechanism with Talbot and Raith et al. for sensing different event and conveniently alerting the user.

9. Claims 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. and further in view of Serbetciouglu et al, US Patent No. 5719918, hereinafter "Serbetciouglu", and further in view of Kniffin.

As per claims 44 and 46-47:

Talbot and Raith et al. disclose "a method according to claim 19, wherein the mobile station is capable of a first type of communication and an indication of a cipher mode". Talbot and Raith et al. do not expressly disclose "a second type of data communication, the method comprising indicating a ciphering mode of the second types of communication to a use of the mobile station". However, Serbetciouglu does teach a second type of data ciphering mode communication (Col 9 lines 15-50). In addition, Kniffin does teach a method of alert the user at different events (Col 7 lines 10-15, and Col 10 lines 10-2). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Talbot and Raith et al. with Serbetciouglu to implement two types of data ciphering communication in a wireless network and incorporate Kniffin to monitor different events of power fluctuation

to alert the user of an incoming communication type ciphering events.

As per claim 45:

Talbot, Raith et al, Serbetciouglu, and Kniffin disclose “a method according to claim 44, wherein the first type of communication is a telephone call and said second type of data communication is a short message (SMS)” in (Serbetciouglu, Col 7 lines 10-15).

10. Claims 36-40, 41-43, 74-76, 80, 86, 88-89, 92, and 122-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. and further in view of Kennedy et al, European Patent No. 0680171A2, hereinafter “Kennedy”.

As per claims 36 and 74:

Talbot and Raith et al. disclose “An apparatus according to claims 19, 59, wherein the resource management block is the actual user intervention control (Col 9 lines 30-48)”. Talbot and Raith do not specifically teach “the apparatus comprises of: a radio resource management block and a cipher indication memory block, wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if said monitored signals comprise a cipher mode

control signal are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set the cipher mode indication data field in said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network". However, Kennedy discloses "the radio resource management block (Col 3 lines 35-44, and Col 4 lines 8-13, Security System Controller) and a cipher indication memory block (also in the Security System Controller) wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if said monitored signals comprise a cipher mode control signal are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set the cipher mode indication data field in said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network (Col 4 line 5 to Col 5 line 28)". Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the features in Kennedy to

Talbot and Raith to electronically control the mode of the communication.

As per claims 37, 75, 89, and 125:

Talbot and Raith et al. disclose “a method and apparatus according to claims 36, 74, 88, and 124”. However, Talbot and Raith do not expressly disclose “the said cipher indication memory block makes an interrupt request in response to a change in the cipher mode indication data field”. However, Kennedy discloses said cipher indication memory block makes an interrupt request in response to a change in the cipher mode indication data field in (Col 4 lines 8-13). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Talbot and Raith to incorporate Kennedy’s feature to electronically controller the mode of the communication.

As per claims 38, 41, 76, 88, 92, and 126:

Talbot, Raith et al., and Kennedy disclose “a method and apparatus according to claims 37, 40, 75, 87, 86, and 125, wherein the user interface block detects said interrupt request and sends an inquiry to the cipher indication memory block to inquire

about the state of the cipher mode indication data field, and the cipher indication memory block returns an indication of the state of said cipher mode indication data field in response to said inquiry” in (Col 4 line 5 to Col 5 line 28 from Kennedy) and (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot).

As per claims 39, 40, 43, and 127:

Talbot, Raith et al., and Kennedy disclose “a method and apparatus according to claims 36, 38, 42, and 126, wherein the mobile station comprises a cipher mode indicator and the user interface block controls the cipher mode indicator according to said indication of the state of the cipher mode indication data field” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claims 42 and 80:

Talbot, Raith et al., and Kennedy disclose “a method and apparatus according to claims 36 and 74, further comprising a user interface block, wherein the user interface block is operable to send repeated inquiries to the cipher indication memory block about the state of the cipher mode indication data field, each

inquiry being separated in time from the next by a predetermined interval and the cipher indication memory block is operable to return an indication of the state of the cipher mode indication data field in response to each inquiry” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 86:

The rejection of Claim 74 is incorporated. Further, Kennedy teaches “the radio resource management block being operable to set the cipher mode indication data file in said cipher indication memory block and the first state being indicative of an unciphered mode of communication to be used in data communication between the communication network and the mobile station” in (Col 4 line 5 to Col 5 line 28 and Col 9 lines 30-48 from Kennedy).

As per claims 122-123 and 132:

Talbot disclose an apparatus for determining a ciphering mode of communication between a mobile communication network and a mobile station, the mobile station being capable of communication

in at least one enciphered mode of communication and at least one unciphered mode of communication.

Talbot further discloses the mobile communication network is configured to use an enciphered mode of communication (Col 3 line 60 to Col 4 line 12).

Talbot does not expressly disclose a cipher mode indicator for indicating a ciphering mode to a user of the mobile station, said cipher mode indicator being operable to indicate that the mobile communication network is configured to use an enciphered mode of communication responsive to an indication from the radio resource management block that said monitored signals comprise a cipher mode control signal.

However, Raith et al. disclose responsive to reception of a cipher mode control signal from the mobile communication network, indicating to a user of the mobile station that the mobile communication network is configured to use an enciphered mode of communication" in (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Col. 8 lines 25-32). In addition, Kennedy discloses "the radio resource management block (Col 3 lines 35-44, and Col 4 lines 8-13, Security System Controller) and a cipher indication memory block (also in the Security System Controller) wherein said means for monitoring signals sent from the mobile communication network to the mobile station and said means for determining if

said monitored signals comprise a cipher mode control signal are arranged in the radio resource management block and a cipher mode indication data field is maintained in the cipher indication memory block, the radio resource management block being further arranged to set the cipher mode indication data field in said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network (Col 4 line 5 to Col 5 line 28). Therefore, it would have been obvious at the time of invention was made for having ordinary skill in the art to modify Talbot teaching with Raith et al. and Kennedy since one would be motivated to (1) selectively establish and maintain cipher synchronization between a base station and mobile station for the encryption of data communications within such a system (Col. 1 lines 29-32 from Raith et al.) and (2) have secure system for the telecommunication system (lines 3-5, Col. 1 from Kennedy).

As per claims 124:

Talbot, Raith et al., and Kennedy disclose “an apparatus according to claim 122, comprising a cipher indication memory block having a cipher mode indication data field, the radio resource management block being operable to set the cipher

mode indication data field of said cipher indication memory block to correspond with cipher indication data in a cipher mode control signal received from the mobile communication network” in (Col 4 line 5 to Col 5 line 28 from Kennedy) and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Col. 8 lines 25-32 from Raith et al.).

As per claims 128:

Talbot, Raith et al., and Kennedy disclose “an apparatus according to claim 124, further comprising a user interface block, wherein the cipher indication memory block is operable to provide an indication of the state of said cipher mode indication data field to the user interface block when the state of said cipher mode indication data field is changed” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claims 129 and 131:

Talbot, Raith et al., and Kennedy disclose “an apparatus according to claim 128 and 130, wherein the user interface block is operable to control the cipher mode indicator according to said indication” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9

lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claims 130:

Talbot, Raith et al., and Kennedy disclose “an apparatus according to claim 124, further comprising a user interface block, wherein the user interface block is operable to send repeated inquiries to the cipher indication memory block about the state of the cipher mode indication data field, each inquiry being separated in time from the next by a predetermined interval and the cipher indication memory block is operable to return an indication of the state of the cipher mode indication data field in response to each inquiry” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claims 133:

Talbot, Raith et al., and Kennedy disclose “a system according to claim 94, wherein the ciphering mode to be used in communication between the mobile communication network and

the mobile station is specified by an operator of the mobile communication network” in (Col. 10 lines 9-30 from Talbot).

As per claims 134:

Talbot, Raith et al., and Kennedy disclose “a system according to claim 94, wherein communication between the mobile communication network and the mobile station takes place at least in part over a radio link” in (Col. 1 lines 5-13 from Talbot).

As per claims 135:

Talbot, Raith et al., and Kennedy disclose “a method according to claim 94, wherein the mobile communication network is a GSM network” in (Col. 4 line 17 from Raith et al.).

11. Claims 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Talbot and Raith et al. in view of Kennedy and Lewis et al, US Patent No. 6192255, hereinafter “Lewis”.

As per claim 49:

Talbot and Raith et al. disclose “a method according to claim 19”. However, Talbot and Raith et al. do not disclose “the mobile

station is used in connection with a data processor external to the mobile station for communication between the mobile communication network and the external data processor, the external data processor comprising a display unit, the method comprising indicating a ciphering mode used in data communication between the mobile station and the mobile communication network on the display unit of the external data processor". However, Kennedy does teach a mobile station is used in connection with a data processor external to the mobile station, and the external data processor comprising a display unit (Figure 2, and Col 1 lines 1-5). The external data processor is another mobile station in connection with the mobile station. The display unit is shown in Figure 9. In addition, Lewis does teach "the indication alert on the display of the ciphering mode" in (Col 19 lines 50-57, and Col 20 lines 10-15). The indication alert gets generated from the power fluctuation sensed by the sensor circuit. Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Talbot and Raith et al. to incorporate Kennedy's and Lewis's teaching to create a complete solution to electronically control the cipher communication and conveniently display the status of the communication for the user.

As per claim 50:

Claim 49 rejection basis is incorporated. Further, Lewis teaches “the external data processor further comprises an acoustic signal forming element, the method comprising indicating a change in ciphering mode used in data communication between the mobile station and the mobile communication network is indicated with the acoustic signal forming element of the external data processor” in (Col 5 lines 10-25).

As per claim 51:

The rejection basis of claim 49 is incorporated, wherein mobile station comprises a cipher indication memory block which maintains a cipher mode indication data filed indicative of a ciphering mode used in communication between the mobile communication network and the mobile station, the method comprising sending an indication of the state of the cipher mode indication field from the mobile station to the external data processor” in (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

As per claim 52:

The rejection basis of claim 49 is incorporated, wherein the mobile station and the external data processor are connected by means of a connection bus” in (Fig 1, Col 3 line 60 to Col 4 line 12 from Talbot).

As per claims 53:

The rejection basis of claim 49 is incorporated. Talbot, Raith et al., Kennedy, and Lewis further disclose the mobile station comprises a cipher indication memory block which maintains a cipher mode indication data field indicative of a ciphering mode used in communication between the mobile communication network and the mobile station, the method comprising receiving at the mobile station a cipher mode inquiry message from the external data processor and sending an indication of the state of the cipher mode indication data field from the mobile station to the external data processor responsive to said cipher mode inquiry message” (Col 4 line 5 to Col 5 line 28 from Kennedy); (Col. 9 lines 45-50 and 67-68; Col. 10, lines 1-8; Fig 1, Col 3 line 60 to Col 4 line 12 from Talbot); and (Col. 5 lines 49-67 to Col. 6 lines 1-23 and Fig. 2, 138 from Raith et al.).

Response to Arguments

12. Applicant's amendment, filed on Apr. 09, 2008, has Claims 19, 21, 27, 35, 49, 51, 53, 55, 59, 74, 82, 86, 97, and 122-123 amended. Among these claims, Claim 19, 59, 82, 97, and 122-123 are the independent claims, and it necessitates a new ground(s) of rejection.

13. Applicant's arguments are moot in view of the new ground of rejections based on the newly found reference by Raith et al. (U. S. Patent 5,546,464) in combination with other previously cited prior art. Please refer rejections above.

Conclusion

14. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- a. Sasuta et al. (U.S. Patent 5,502,767) disclose synchronization of secure information on a control channel (104) of a secure radio trunking communication system (100), is maintained by periodically transmitting control encryption parameters (CEP) (111) by the controller (101) on the control channel (104). A secure communication unit (102 and 103) may receive and store the CEP (111) in memory (108 and 109), and subsequently, use the stored CEP (111) to communicate securely with the controller (101) on the control channel (104). When the secure communication unit is assigned to a working channel (105-107), the controller periodically sends the CEP (117) to the secure communication unit (102 and 103) on the working channel (105-107). When the secure communication unit (102 and 103) returns to the control channel (104), the secure communication unit may use the CEP (117) stored in the memory (108 and 109) to communicate securely on the control channel (104).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yin-Chen Shaw whose telephone

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number is 571-272-8593. The examiner can normally be reached on 8:15 to 4:15 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached 571-272-4063.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YCS

Jul. 03, 2008

/Kristine Kincaid/
Supervisory Patent Examiner, Art Unit 2139